What is claimed is:

- 1. A method for purifying polymer-containing alkyl ester-based solvent comprising the steps of
 - a) feeding said polymer-containing alkyl ester based solvent into a centrifuge;
- b) centrifuging said polymer-containing alkyl ester based solvent to separate the polymer from the alkyl ester based solvent resulting in a polymer-free alkyl ester based solvent; and
 - c) removing said polymer-free alkyl ester based solvent from the centrifuge.
- 10 2. The method of claim 1, wherein the steps comprises a continuous process.
 - 3. The process of claim 1, wherein the process is a batch process.
- 4. The method of claim 1, wherein the alkyl ester is alkyl ester of fatty acids with 8-18 carbons.
 - 5. The method of claim 1, wherein the polymer is selected from the group consisting of block co-polymers of styrene and butadiene, block co-polymers of styrene and isoprene, co-polymers of butadiene and acrylonitrile, terpolymers of butadiene, acrylonitrile, and acrylic acid.
 - 6. The method of claim 1, wherein said alkyl ester based solvent comprises at least one alkyl ester.

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- 7. The method of claim 6, wherein said alkyl ester based solvent further comprises a co-solvent.
- 8. The method of claim 7, wherein said alkyl ester based solvent further comprises a non-solvent.
 - 9. The method of claim 1, wherein the centrifuge is a bowl disc centrifuge with conical discs.
- 10 10. The method of claim 1, wherein the centrifuging step is performed at g forces of at least about 4000.
 - 11. The method of claim 1, wherein the alkyl ester based solvent is maintained at about 70°F.
 - 12. The method of claim 1, wherein the alkyl group of the alkyl ester has 1 to 12 carbon atoms.

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